

## Title (en)

PREHEATING CONTROL METHOD FOR ELECTRONIC CIGARETTE AND PREHEATING CONTROL SYSTEM THEREOF

## Title (de)

VERFAHREN ZUR STEUERUNG DER VORERWÄRMUNG FÜR ELEKTRONISCHE ZIGARETTE UND SYSTEM ZUR STEUERUNG DER VORERWÄRMUNG DAFÜR

## Title (fr)

PROCÉDÉ DE COMMANDE DE PRÉCHAUFFAGE POUR CIGARETTE ÉLECTRONIQUE ET SON SYSTÈME DE COMMANDE DE PRÉCHAUFFAGE

## Publication

**EP 3939452 A4 20220518 (EN)**

## Application

**EP 20832817 A 20200602**

## Priority

- CN 2020094007 W 20200602
- CN 201910563768 A 20190626

## Abstract (en)

[origin: EP3939452A1] An electronic cigarette preheating control method and preheating control system are provided. The method performs data interaction by communication connection established between an intelligent terminal and the electronic cigarette, allows for displaying and changing preheating parameters on a control software interface of the intelligent terminal, and sends the updated preheating parameters to the microcontroller MCU arranged in the electronic cigarette to replace previous preheating parameters preset in the microcontroller MCU. When the electronic cigarette is turned on, based on real-time temperature value detected by temperature detection unit arranged in the electronic cigarette, determining whether preheating of the cigarette liquid stored inside the liquid storage chamber is required by means of the microcontroller MCU. If yes, based on preheating parameters and preset routine, controlling the heating device of the electronic cigarette by means of the microcontroller MCU to perform heating for the preset heating time or until the preset target temperature value is reached. Then, ending the preheating and entering the available stand-by state of the electronic cigarette. After preheating, the cigarette liquid or liquid substances containing drugs may easily penetrate or flow to the heating device for vaporization, such that the electronic cigarette may easily produce vapor even at low temperature.

## IPC 8 full level

**A24F 40/57** (2020.01); **A24F 40/65** (2020.01)

## CPC (source: EP US)

**A24F 40/10** (2020.01 - US); **A24F 40/46** (2020.01 - US); **A24F 40/51** (2020.01 - US); **A24F 40/57** (2020.01 - EP US); **A24F 40/60** (2020.01 - US); **A24F 40/65** (2020.01 - EP US); **H05B 1/0244** (2013.01 - US); **A24F 40/10** (2020.01 - EP)

## Citation (search report)

- [Y] WO 2019001386 A1 20190103 - CHANGZHOU PATENT ELECTRONIC TECH CO LTD [CN]
- [Y] WO 2019031871 A1 20190214 - KT & G CORP [KR]
- [YA] WO 2018201858 A1 20181108 - CHANGZHOU PATENT ELECTRONIC TECH CO LTD [CN]
- [A] WO 2019105879 A1 20190606 - PHILIP MORRIS PRODUCTS SA [CH]
- See also references of WO 2020259230A1

## Cited by

US11789476B2

## Designated contracting state (EPC)

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